



INSTRUCTIONS FOR THE PHANTOM (PHT12) FORM

I. General Instructions

The Phantom Form is used to match the phantom ID to the original ARIC participant ID for participants who provide a replicate specimen within the same visit. After the form is complete, enter the data into the data entry system using the ARIC ID, and file the original paper form.

Repeat samples are collected for all blood and urine specimens. Repeat blood samples consist of one extra tube being drawn for each randomly selected participant. The repeat urine sample will be collected from the participant who also provides the QC blood sample tube 1. A phantom ID will be assigned to every extra blood tube collected, but the urine sample will be assigned the same phantom ID as QC blood tube 1. The target is to achieve 5% QC repeats for each specimen tube. In order to achieve this target, a total of 30% of participants will be selected to give a QC sample. To determine if a participant has been randomly selected to donate an additional Phantom (QC) tube look at the "Participant Snapshot Report" in the "General Appointment Information" section. This information can also be found in the participant's BIO form, item 0c which is system generated in CDART.

To track the phantom and matching ARIC IDs place the ARIC ID and the Phantom ID on the Phantom Tracking Sheet (see below) as the specimens are collected. A Phantom ID label is chosen off the phantom ID label roll for each participant in the order that the label appears on the roll. All phantom tubes should be collected in the order they are listed on the Phantom Tracking Sheet. Once all specimens have been collected from a tracking sheet, file the completed Phantom Tracking sheet in a confidential location and start a new tracking sheet. **NOTE: Phantom ID numbers are confidential. Do not send a copy of the PHT or the Phantom Tracking sheet to the laboratories.**

The instructions in this QxQ also apply to the ARIC Generation 2 study. In ARIC Generation 2, the participant snapshot report is not used, so the Biospecimen form can be used to see if the participant is selected for QC. Note that ARIC Generation 2 phantom IDs are not taken from the same list as ARIC phantom IDs. Please be sure to check that you are using the ARIC Generation 2 phantom IDs for participants in that study.

II. Detailed Instructions for each item

Place the ARIC ID label for the participant who is providing the repeat sample in the header portion of the form.

0a. Enter the date that the paper form is completed or if no paper form is completed enter the date information is entered into CDART.

0b. Enter the technician code of the person drawing the samples.

1. Enter the selected Phantom ID for a given participant.
2. If tube 1 and the urine sample are collected from the ARIC participant, select answer choice "1". If you are able to obtain tube 1 but are unable to obtain the urine sample or vice versa, make a note of this in a notelog. If you are unable to draw 10 mL of serum or 10 cc urine make a note of the amount that you were able to obtain in a notelog.

Using tube 1, make SR1-8 aliquots for QC. Using the urine collection make UR1-6 (1.5 mL) aliquots for QC. Record in a notelog the aliquots you were able to create, if you are unable to make all of the aliquots. SR1-6 along with UR1-4 will be shipped to the UMN laboratory. The remaining SR7-8 and UR5-6 will be shipped to the ACRL laboratory.

If tube 2 is collected from the ARIC participant, select answer choice "2". If you are unable to draw 10 mL of EDTA plasma make a note of the amount that you were able to obtain in a notelog.

Using tube 2, make the following aliquots for this QC: HbA1C and UT1-4. HbA1C and UT1-2 will be shipped to the UMN laboratory. The remaining UT3-4 will be shipped to the ACRL laboratory. Record in a notelog which aliquots you were able to create, if you are unable to make all the aliquots

If tube 3 is collected from the ARIC participant, select answer choice "3". If you are unable to draw 10 mL of EDTA plasma make a note of the amount that you were able to obtain in a notelog.

Using tube 3, make the following aliquots for this QC: UT5-8 and one Buffy Coat (BC1). These aliquots will be shipped to the ACRL laboratory. Record in a notelog which aliquots you were able to create if you are unable to make all the aliquots.

If tube 4 is collected from the ARIC participant, select answer choice "4". If you are unable to draw 10 mL of BHT-treated EDTA make a note of the amount that you were able to obtain in a notelog.

Using tube 4, make the following aliquots for this QC: T1-3. These aliquots will be shipped to the ACRL laboratory. Record in a notelog which aliquots you were able to create if you are unable to make all the aliquots.

If tube 5 is collected from the ARIC participant, select answer choice "5". If you are unable to draw 2.5 mL red blood for the PAXgene tube, make a note of the amount that you were able to obtain in a notelog. This tube will be shipped to the ACRL laboratory.

3. Indicate the number of aliquots yielded after processing depending on which tube was collected in Q 2:

- a. If tube 1 was collected, indicate the number of serum aliquots obtained after processing.
- b. If tube 2 or tube 3 was collected, indicate how many EDTA plasma aliquots were obtained after processing.
- c. If tube 4 was collected, indicate the number of EDTA + BHT plasma aliquots obtained after processing.
- d. If tube 3 was collected, indicate the number of Buffy Coat aliquots obtained after processing.
- e. If tube 2 was collected, indicate the number of Whole Blood aliquots obtained after processing.
- f. If urine was collected, indicate the number of urine aliquots obtained after processing.